

NEWS 7 MAY 21 CA/CAplus enhanced with additional kind codes for German patents
NEWS 8 MAY 22 CA/CAplus enhanced with IPC reclassification in Japanese patents
NEWS 9 JUN 27 CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 10 JUN 29 STN Viewer now available
NEWS 11 JUN 29 STN Express, Version 8.2, now available
NEWS 12 JUL 02 LEMBASE coverage updated
NEWS 13 JUL 02 LMEDLINE coverage updated
NEWS 14 JUL 02 SCISEARCH enhanced with complete author names
NEWS 15 JUL 02 CHEMCATS accession numbers revised
NEWS 16 JUL 02 CA/CAplus enhanced with utility model patents from China
NEWS 17 JUL 16 CAplus enhanced with French and German abstracts
NEWS 18 JUL 18 CA/CAplus patent coverage enhanced
NEWS 19 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 20 JUL 30 USGENE now available on STN
NEWS 21 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 22 AUG 06 BEILSTEIN updated with new compounds
NEWS 23 AUG 06 FSTA enhanced with new thesaurus edition

NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0C(ENG) AND V6.0JC(JP),
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

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FILE 'HOME' ENTERED AT 09:42:06 ON 08 AUG 2007

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 09:42:16 ON 08 AUG 2007
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FILE COVERS 1907 - 8 Aug 2007 VOL 147 ISS 7
FILE LAST UPDATED: 7 Aug 2007 (20070807/ED)

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=> (coating or coated) with sterol
(COATING IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (>).

=> s (coating or coated) with sterol
MISSING OPERATOR COATED) WITH

The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s coating with sterol
 802861 COATING
 373955 COATINGS
 865186 COATING
 (COATING OR COATINGS)
 25171 STEROL
 24579 STEROLS
 36705 STEROL
 (STEROL OR STEROLS)
L1 3 COATING WITH STEROL
 (COATING(1W) STEROL)

=> s coated with sterol
 517806 COATED
 2 COATEDS
 517808 COATED
 (COATED OR COATEDS)
 25171 STEROL
 24579 STEROLS
 36705 STEROL
 (STEROL OR STEROLS)
L2 3 COATED WITH STEROL
 (COATED(1W) STEROL)

=> s L1 and L2
L3 1 L1 AND L2

=> d scan

L3 1 ANSWERS CAPLUS COPYRIGHT 2007 ACS on STN
IC ICM A61K031-56
 ICS A23L001-30; A23P001-02; A61J003-02; A61J003-10; A61K009-14;
 A61K009-20; A61K031-575; A61K047-36; A61K047-42; A61P001-00;
 A61P003-06; A61P013-08; A61P035-00
CC 17-14 (Food and Feed Chemistry)
 Section cross-reference(s): 63
TI Easily water-dispersible powders containing sterols and their compressed
 moldings, manufacture, and food use
ST gum arabic phytosterol powder food; sugar protein sterol tablet food;
 coating sterol emulsion drying sugar protein
IT Caseins, biological studies
 RL: FFD (Food or feed use); PEP (Physical, engineering or chemical
 process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological
 study); PROC (Process); USES (Uses)
 (acid; easily water-dispersible powders and tablets containing sugar- or
 protein-coated sterols manufactured by drying emulsions)
IT Coating process
 Drying
 Food

Powders
Tablets
(easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Carbohydrates, biological studies
Gelatins, biological studies
Lactalbumins
Sterols
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Emulsions
(oil-in-water; easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Sterols
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(phyto-; easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Drug delivery systems
(powders; easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Caseins, biological studies
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(sodium complexes, Instan-Rac S; easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Proteins
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(soybean; easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Drug delivery systems
(tablets; easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Proteins
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(wheat; easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT Proteins
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(whey; easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

IT 57-87-4, Ergosterol 83-46-5, β -Sitosterol 83-48-7, Stigmasterol 474-62-4, Campesterol 474-67-9, Brassicasterol 9000-01-5, Arabic Cool SS 9057-02-7, Pullulan 11138-66-2, Xanthan gum 52906-93-1, Purity Gum BE
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(easily water-dispersible powders and tablets containing sugar- or protein-coated sterols manufactured by drying emulsions)

=> s coating with (hexane and ethanol)
AND IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s ethanol or "ethyl alcohol"
277138 ETHANOL
1140 ETHANOLS
277694 ETHANOL
(ETHANOL OR ETHANOLS)
475605 "ETHYL"
28 "ETHYLS"
475627 "ETHYL"
("ETHYL" OR "ETHYLS")
660218 "ET"
8064 "ETS"
666708 "ET"
("ET" OR "ETS")
1000796 "ETHYL"
("ETHYL" OR "ET")
266615 "ALCOHOL"
174802 "ALCOHOLS"
408386 "ALCOHOL"
("ALCOHOL" OR "ALCOHOLS")
594250 "ALC"
195547 "ALCS"
693654 "ALC"
("ALC" OR "ALCS")
853772 "ALCOHOL"
("ALCOHOL" OR "ALC")
36246 "ETHYL ALCOHOL"
("ETHYL" (W) "ALCOHOL")
L4 306906 ETHANOL OR "ETHYL ALCOHOL"

=> s hexane and L4
AND IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s hexane and L4
114347 HEXANE
2013 HEXANES
115501 HEXANE
(HEXANE OR HEXANES)
L5 9915 HEXANE AND L4

=> S coating with L5
MISSING OPERATOR WITH L5

The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s coating near L5
MISSING OPERATOR NEAR L5
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s L5 with coating
MISSING OPERATOR L5 WITH
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> d his

(FILE 'HOME' ENTERED AT 09:42:06 ON 08 AUG 2007)

FILE 'CAPLUS' ENTERED AT 09:42:16 ON 08 AUG 2007

L1 3 S COATING WITH STEROL
L2 3 S COATED WITH STEROL
L3 1 S L1 AND L2
L4 306906 S ETHANOL OR "ETHYL ALCOHOL"
L5 9915 S HEXANE AND L4

=> S L5 and sterol

25171 STEROL
24579 STEROLS
36705 STEROL
(STEROL OR STEROLS)

L6 82 L5 AND STEROL

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	22.79	23.00

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 09:48:15 ON 08 AUG 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAALF1616

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 09:49:02 ON 08 AUG 2007
FILE 'CAPLUS' ENTERED AT 09:49:02 ON 08 AUG 2007
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	22.79	23.00

=> s (coating or coated) (W) sterol
802861 COATING
373955 COATINGS
865186 COATING
(COATING OR COATINGS)
517806 COATED
2 COATEDS
517808 COATED
(COATED OR COATEDS)
25171 STEROL
24579 STEROLS
36705 STEROL
(STEROL OR STEROLS)

L7 1 (COATING OR COATED) (W) STEROL

=> S (coating or coated) (W) (hexane? and (ethanol or ethyl alcohol))

PROXIMITY OPERATION NOT ALLOWED

Certain operators may not be nested in combination with other operators. A nested operator is valid only when it occurs at the same level or above the operator outside the nested phrase as determined by

the following precedence list:

1. Numeric
2. (W), (NOTW), (A), (NOTA)
3. (S), (NOTS)
4. (P), (NOTP)
5. (L), (NOTL)
6. AND, NOT
7. OR

For example, '(MONOCLONAL (W) ANTIBOD?) (L) ANTIGEN?' is valid since (W) is above (L) on the precedence list. However, '((THIN (W) LAYER) (L) PHOSPHOLIPID#) (A) LACTONE#' is not valid since (L) is below (A) on the precedence list. The only exception is the 'OR' operator. This operator may be used in combination with any other operator. For example, '(ATOMIC OR NUCLEAR) (W) REACTOR' is valid.

```
=> s ethanol or ethyl alcohol
    277138 ETHANOL
        1140 ETHANOLS
    277694 ETHANOL
        (ETHANOL OR ETHANOLS)
    475605 ETHYL
        28 ETHYLS
    475627 ETHYL
        (ETHYL OR ETHYLS)
    660218 ET
        8064 ETS
    666708 ET
        (ET OR ETS)
1000796 ETHYL
        (ETHYL OR ET)
    266615 ALCOHOL
    174802 ALCOHOLS
    408386 ALCOHOL
        (ALCOHOL OR ALCOHOLS)
    594250 ALC
    195547 ALCS
    693654 ALC
        (ALC OR ALCS)
    853772 ALCOHOL
        (ALCOHOL OR ALC)
    36246 ETHYL ALCOHOL
        (ETHYL (W) ALCOHOL)
L8      306906 ETHANOL OR ETHYL ALCOHOL
```

```
=> s L8 (W) hexane?
    157618 HEXANE?
L9      240 L8 (W) HEXANE?
```

```
=> S (coating or coated) (W) L9
    802861 COATING
    373955 COATINGS
    865186 COATING
        (COATING OR COATINGS)
    517806 COATED
        2 COATEDS
    517808 COATED
        (COATED OR COATEDS)
L10      0 (COATING OR COATED) (W) L9
```

```
=> d his
```

```
(FILE 'HOME' ENTERED AT 09:42:06 ON 08 AUG 2007)
```

FILE 'CAPLUS' ENTERED AT 09:42:16 ON 08 AUG 2007

L1 3 S COATING WITH STEROL
L2 3 S COATED WITH STEROL
L3 1 S L1 AND L2
L4 306906 S ETHANOL OR "ETHYL ALCOHOL"
L5 9915 S HEXANE AND L4
L6 82 S L5 AND STEROL
L7 1 S (COATING OR COATED) (W) STEROL
L8 306906 S ETHANOL OR ETHYL ALCOHOL
L9 240 S L8 (W) HEXANE?
L10 0 S (COATING OR COATED) (W) L9

=> S L6 and PY<2006
 26197270 PY<2006
L11 73 L6 AND PY<2006

=> d scan

L11 73 ANSWERS CAPLUS COPYRIGHT 2007 ACS on STN
IC ICM C07D311-72
CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
TI Extraction of high-content tocopherol from byproduct of vegetable oil
refinement
ST tocopherol sterol purifn esterification vegetable oil extn
IT Esterification
Extraction
 (extraction of high-content tocopherol from byproduct of vegetable oil
refinement)
IT Silica gel, uses
RL: NUU (Other use, unclassified); USES (Uses)
 (extraction of high-content tocopherol from byproduct of vegetable oil
refinement)
IT Sterols
RL: PUR (Purification or recovery); PREP (Preparation)
 (extraction of high-content tocopherol from byproduct of vegetable oil
refinement)
IT Tocopherols
RL: PUR (Purification or recovery); PREP (Preparation)
 (extraction of high-content tocopherol from byproduct of vegetable oil
refinement)
IT Fats and Glyceridic oils, miscellaneous
RL: MSC (Miscellaneous)
 (vegetable; extraction of high-content tocopherol from byproduct of
vegetable oil refinement)
IT 1344-28-1, Aluminum oxide, uses 7440-44-0, Carbon, uses
RL: NUU (Other use, unclassified); USES (Uses)
 (activated; extraction of high-content tocopherol from byproduct of
vegetable oil refinement)
IT 64-17-5, Ethanol, uses 64-18-6, Formic acid, uses 64-19-7,
Acetic acid, uses 67-56-1, Methanol, uses 71-43-2, Benzene, uses
79-09-4, Propionic acid, uses 110-54-3, n-Hexane, uses
141-78-6, Ethyl acetate, uses 7681-38-1, Sodium hydrogensulfate
RL: NUU (Other use, unclassified); USES (Uses)
 (extraction of high-content tocopherol from byproduct of vegetable oil
refinement)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 73 ANSWERS CAPLUS COPYRIGHT 2007 ACS on STN
CC 9-3 (Biochemical Methods)
Section cross-reference(s): 6, 13
TI Improved procedure for the separation of major stratum corneum lipids by
means of automated multiple development thin-layer chromatography
ST lipid skin stratum corneum thin layer chromatog
IT Sterols

RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(esters; separation of major stratum corneum lipids by means of automated multiple development thin-layer chromatog.)

IT TLC (thin layer chromatography)
(high-performance; separation of major stratum corneum lipids by means of automated multiple development thin-layer chromatog.)

IT Human
(separation of major stratum corneum lipids by means of automated multiple development thin-layer chromatog.)

IT Ceramides

Fatty acids, analysis

Glycerides, analysis

Lipids, analysis

Waxes

RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(separation of major stratum corneum lipids by means of automated multiple development thin-layer chromatog.)

IT Skin
(stratum corneum; separation of major stratum corneum lipids by means of automated multiple development thin-layer chromatog.)

IT 57-10-3, Palmitic acid, analysis 57-88-5, Cholesterol, analysis
111-02-4, Squalene 303-43-5, Cholesteryl oleate 1256-86-6,
Cholesterol-3-sulfate

RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(separation of major stratum corneum lipids by means of automated multiple development thin-layer chromatog.)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 73 ANSWERS CAPLUS COPYRIGHT 2007 ACS on STN

IC ICM C11B001-02

ICS A23K001-14; C08B003-00; C08B011-00; C08B037-14; C13K013-00;
D21C005-00; C12S003-00

CC 17-12 (Food and Feed Chemistry)

Section cross-reference(s): 11

TI Corn fiber for the production of advanced chemicals and materials

ST corn fiber sterol cellulose arabinoxylan deriv monosaccharide

IT Extractants

Feed
(corn fiber for production of advanced chems. and materials)

IT Corn oil

RL: FFD (Food or feed use); PUR (Purification or recovery); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(corn fiber for production of advanced chems. and materials)

IT Monosaccharides

Sterols

RL: PUR (Purification or recovery); PREP (Preparation)
(corn fiber for production of advanced chems. and materials)

IT Sterols

RL: PUR (Purification or recovery); PREP (Preparation)
(esters; corn fiber for production of advanced chems. and materials)

IT Corn

(fiber; corn fiber for production of advanced chems. and materials)

IT Solvents

(organic; corn fiber for production of advanced chems. and materials)

IT 74-83-9, Methyl bromide, uses 74-87-3, Methyl chloride, uses 74-88-4,
Methyl iodide, uses 74-96-4, Ethyl bromide 75-21-8, Oxirane, uses
75-56-9, uses 79-11-8, Chloroacetic acid, uses 96-09-3, Styrene oxide
96-34-4, Chloroacetic acid, methyl ester 100-39-0, Benzyl bromide
105-39-5, Chloroacetic acid, ethyl ester 106-89-8, uses 106-94-5,
Propyl bromide 109-65-9, Butyl bromide 556-52-5, Glycidol 930-22-3
1912-31-8 3926-62-3, Sodium chloroacetate 26249-20-7, Butylene oxide

51109-21-8
 RL: NUU (Other use, unclassified); USES (Uses)
 (O-alkylating agent; corn fiber for production of advanced chems. and materials)

IT 689-98-5D, 1-Amino-2-chloroethane, N,N-dialkyl derivs.
 RL: NUU (Other use, unclassified); USES (Uses)
 (O-alkylating agents; corn fiber for production of advanced chems. and materials)

IT 75-75-2, Methanesulfonic acid 407-25-0, Trifluoroacetic anhydride
 7664-93-9, Sulfuric acid, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (catalyst; corn fiber for production of advanced chems. and materials)

IT 9000-92-4, Amylase 9001-92-7, Protease 37278-89-0, Xylanase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (corn fiber for production of advanced chems. and materials)

IT 9040-27-1P, Arabinoxylan
 RL: PUR (Purification or recovery); PREP (Preparation)
 (corn fiber for production of advanced chems. and materials)

IT 9004-34-6P, Cellulose, preparation
 RL: PUR (Purification or recovery); RCT (Reactant); PREP (Preparation);
 RACT (Reactant or reagent)
 (corn fiber for production of advanced chems. and materials)

IT 9004-34-6DP, Cellulose, esters, preparation 9004-34-6DP, Cellulose, ethers, preparation 9004-35-7P, Cellulose acetate 9004-36-8P, Cellulose acetate butyrate 9004-39-1P, Cellulose acetate propionate 9004-48-2P, Cellulose propionate 9015-12-7P, Cellulose butyrate 9036-95-7P, Cellulose formate 9040-27-1DP, Arabinoxylan, esters 9040-27-1DP, Arabinoxylan, ethers 103938-35-8P, Cellulose formate acetate 103938-39-2P, Cellulose formate propionate 288395-61-9P, Cellulose formate butyrate 288395-62-0P, Arabinoxylan formate 288395-63-1P, Arabinoxylan acetate 288395-64-2P, Arabinoxylan propionate 288395-65-3P, Arabinoxylan butyrate 288395-66-4P, Arabinoxylan formate acetate 288395-67-5P, Arabinoxylan formate propionate 288395-68-6P, Arabinoxylan formate butyrate 288395-69-7P, Arabinoxylan acetate propionate 288395-70-0P, Arabinoxylan acetate butyrate
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (corn fiber for production of advanced chems. and materials)

IT 471-34-1, Calcium carbonate, uses 497-19-8, Sodium carbonate, uses 584-08-7, Potassium carbonate 1305-62-0, Calcium hydroxide, uses 1310-58-3, Potassium hydroxide, uses 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, uses 1336-21-6, Ammonium hydroxide
 RL: NUU (Other use, unclassified); USES (Uses)
 (extractant; corn fiber for production of advanced chems. and materials)

IT 60-29-7, Diethyl ether, uses 64-17-5, Ethanol, uses 67-63-0, Isopropyl alcohol, uses 67-64-1, Acetone, uses 71-36-3, Butyl alcohol, uses 78-93-3, Methyl ethyl ketone, uses 108-10-1 110-54-3, Hexane, uses 141-78-6, Acetic acid ethyl ester, uses 142-82-5, Heptane, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (solvent; corn fiber for production of advanced chems. and materials)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 09:42:06 ON 08 AUG 2007)

FILE 'CAPLUS' ENTERED AT 09:42:16 ON 08 AUG 2007

L1	3 S COATING WITH STEROL
L2	3 S COATED WITH STEROL
L3	1 S L1 AND L2
L4	306906 S ETHANOL OR "ETHYL ALCOHOL"
L5	9915 S HEXANE AND L4
L6	82 S L5 AND STEROL

L7 1 S (COATING OR COATED) (W) STEROL
L8 306906 S ETHANOL OR ETHYL ALCOHOL
L9 240 S L8 (W) HEXANE?
L10 0 S (COATING OR COATED) (W) L9
L11 73 S L6 AND PY<2006

=> L6 and PY<2004

L6 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s L6 and PY<2004

23927540 PY<2004

L12 56 L6 AND PY<2004

=> d scan

L12 56 ANSWERS CAPPLUS COPYRIGHT 2007 ACS on STN
CC 17-7 (Food and Feed Chemistry)
TI Cholesterol content in chicken meat and chicken products
ST chicken meat product cholesterol content
IT Meat
 (chicken, liver; cholesterol content in chicken meat and meat products)
IT Meat
 (chicken; cholesterol content in chicken meat and meat products)
IT Animal tissue
 (cholesterol content in chicken meat and meat products)
IT Meat
 (ham; cholesterol content in chicken meat and meat products)
IT Meat
 (sausage, bologna; cholesterol content in chicken meat and meat products)
IT Meat
 (sausage; cholesterol content in chicken meat and meat products)
IT 57-88-5, Cholesterol, biological studies 83-48-7, Stigmasterol
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
 (cholesterol content in chicken meat and meat products)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 09:42:06 ON 08 AUG 2007)

FILE 'CAPPLUS' ENTERED AT 09:42:16 ON 08 AUG 2007
L1 3 S COATING WITH STEROL
L2 3 S COATED WITH STEROL
L3 1 S L1 AND L2
L4 306906 S ETHANOL OR "ETHYL ALCOHOL"
L5 9915 S HEXANE AND L4
L6 82 S L5 AND STEROL
L7 1 S (COATING OR COATED) (W) STEROL
L8 306906 S ETHANOL OR ETHYL ALCOHOL
L9 240 S L8 (W) HEXANE?
L10 0 S (COATING OR COATED) (W) L9
L11 73 S L6 AND PY<2006
L12 56 S L6 AND PY<2004

=> L12 not cholesterol

L12 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s L12 not cholesterol
 18 CHOLESTEROL
L13 56 L12 NOT CHOLESTEROL

=> s L13 and stigmasterol or sitosterol or campesterol or brassicasterol or
sitostanol or casterol
 6498 STIGMASTEROL
 22 STIGMASTEROLS
 6507 STIGMASTEROL
 (STIGMASTEROL OR STIGMASTEROLS)
 14269 SITOSTEROL
 1112 SITOSTEROLS
 14613 SITOSTEROL
 (SITOSTEROL OR SITOSTEROLS)
 4029 CAMPESTEROL
 3 CAMPESTEROLS
 4030 CAMPESTEROL
 (CAMPESTEROL OR CAMPESTEROLS)
 965 BRASSICASTEROL
 2 BRASSICASTEROLS
 965 BRASSICASTEROL
 (BRASSICASTEROL OR BRASSICASTEROLS)
 687 SITOSTANOL
 1 SITOSTANOLS
 688 SITOSTANOL
 (SITOSTANOL OR SITOSTANOLS)
 9 CASTEROL
L14 15611 L13 AND STIGMASTEROL OR SITOSTEROL OR CAMPESTEROL OR BRASSICASTEROL
 OR SITOSTANOL OR CASTEROL

=> s L13 and (stigmasterol or sitosterol or campesterol or ?casterol or sitostanol)
 6498 STIGMASTEROL
 22 STIGMASTEROLS
 6507 STIGMASTEROL
 (STIGMASTEROL OR STIGMASTEROLS)
 14269 SITOSTEROL
 1112 SITOSTEROLS
 14613 SITOSTEROL
 (SITOSTEROL OR SITOSTEROLS)
 4029 CAMPESTEROL
 3 CAMPESTEROLS
 4030 CAMPESTEROL
 (CAMPESTEROL OR CAMPESTEROLS)
 1057 ?CASTEROL
 687 SITOSTANOL
 1 SITOSTANOLS
 688 SITOSTANOL
 (SITOSTANOL OR SITOSTANOLS)
L15 19 L13 AND (STIGMASTEROL OR SITOSTEROL OR CAMPESTEROL OR ?CASTEROL
 OR SITOSTANOL)

=> d L15 1-19 abs ibib

L15 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB The process for recovery of plant sterols and tocopherols from deodorization distillates formed during chemical or phys. refining of vegetable oils consists of the following steps: free fatty acids are removed from the deodorization distillate by vacuum distillation or by continuation solvent saponification, after the removal of free fatty acids, the received material is reacted with an aromatic carboxylic acid anhydride at a temperature of 50-150° C, under reduced pressure, after the treatment with anhydride, tocopherols are removed from the mixture, and crystalline free sterols are recovered from the distillation residue containing sterol esters, di- and triglycerides by transesterification.

ACCESSION NUMBER: 2004:2987 CAPLUS
 DOCUMENT NUMBER: 140:58755
 TITLE: Process for recovery of plant sterols from
 by-product of vegetable oil refining
 INVENTOR(S): Czuppon, Tibor; Kemeny, Zsolt; Kovari, Endrene;
 Recseg, Katalin
 PATENT ASSIGNEE(S): Cereol Novevenyolajipari Rt., Hung.
 SOURCE: PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000979	A1	20031231	WO 2002-HU62	20020702 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
HU 200202024	A2	20040329	HU 2002-2024	20020619
CA 2501963	A1	20031231	CA 2002-2501963	20020702 <--
AU 2002321664	A1	20040106	AU 2002-321664	20020702
BR 2002015782	A	20050301	BR 2002-15782	20020702
EP 1520003	A1	20050406	EP 2002-755376	20020702
EP 1520003	B1	20070425		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005530018	T	20051006	JP 2004-515075	20020702
CN 1732251	A	20060208	CN 2002-829395	20020702
MX 2004PA12787	A	20050920	MX 2004-PA12787	20041216
IN 2005DN00164	A	20060609	IN 2005-DN164	20050117
US 2006135794	A1	20060622	US 2005-519769	20050624
PRIORITY APPLN. INFO.:			HU 2002-2024	A 20020619
			WO 2002-HU62	W 20020702
REFERENCE COUNT:	4	THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L15 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
 AB The present invention relates to the use of "green" or relatively benign
 solvents such as ethanol, ethanol/water, iso-Pr alc.,
 iso-Pr alc./water, Et lactate, acetone, butanol, isoamyl alc., or Et
 acetate to extract phytosterols from wet corn fiber. The resulting oil
 product contains free phytosterols and free fatty acids.

ACCESSION NUMBER: 2003:1007616 CAPLUS
 DOCUMENT NUMBER: 140:31423
 TITLE: Extraction of phytosterols from corn fiber using
 "green" solvents
 INVENTOR(S): Abbas, Charles; Rammelsberg, Anne M.; Beery, Kyle
 USA
 PATENT ASSIGNEE(S):
 SOURCE: U.S. Pat. Appl. Publ., 10 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2003235633 A1 20031225 US 2003-392926 20030321 <--
PRIORITY APPLN. INFO.: US 2002-365816P P 20020321

L15 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB There are many reports on biol. activities of pentacyclic triterpenoids, which could be relevant to the pharmacol. effects including anti-inflammatory properties. Dandelion (*Taraxacum officinale* Wiggers et Weber, Asteraceae) is one of the best known European medicinal plants, rich in triterpenoids, which was used for the treatment of various inflammatory diseases such as rheumatoid arthritis and also for many infectious disorders. The aim of this work was to investigate the supercrit. fluid extraction (SFE) of dandelion crude drugs (*Taraxaci radix* and *T. folium*) with carbon dioxide, to study the extraction of triterpenoids and phytosterols and to compare supercrit. CO₂ extracted products and exts. made by traditional solvent extns. (n-hexane and ethanol 96%). Solvent extns. were carried out using a Soxhlet extractor. To define the effect of temperature and pressure on the yield of supercrit. fluid extraction, a 2 factorial 3 level experiment chain was performed. The content of triterpenes and phytosterols was determined, after saponification, by thin layer chromatog.-densitometry. The products gained by SFE were different from the traditional ones concerning their apperancy and composition; triterpenes and their esters could be extracted quant. by supercrit. fluid extraction using CO₂ as solvent; the extraction dynamic for β-amyrin and β-sitosterol was different; triterpenes have a higher concentration in the SFE product then in traditional ones. By means of supercrit. fluid extraction of *Taraxacum* crude drugs, in function of the selectivity of the solvent, temperature, pressure and accompanying constituents, qual. new products can be gained. These may serve as prospective raw materials for phytopharmaceuticals.

ACCESSION NUMBER: 2003:306986 CAPLUS
DOCUMENT NUMBER: 139:341514
TITLE: Production and characterization of *Taraxacum officinale* extracts prepared by supercritical fluid and solvent extractions
AUTHOR(S): Kristo, T. Sz.; Szoke, E.; Kery, A.; Terdy, P. P.; Selmeczi, L. K.; Simandi, B.
CORPORATE SOURCE: Department of Pharmacognosy, Semmelweis University, Budapest, H-1085, Hung.
SOURCE: Acta Horticulturae (2003), 597 (Proceedings of the International Conference on Medicinal and Aromatic Plants, Part II, 2001), 57-61
CODEN: AHORA2; ISSN: 0567-7572
PUBLISHER: International Society for Horticultural Science
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB The chemical composition of six lipophilic extractives from wheat straw by extraction

with toluene-ethanol (2:1, volume/volume), chloroform-methanol (2:1, volume/volume), Me tert-Bu ether, hexane, petroleum ether, and dichloromethane, resp., in a Soxhlet extractor, and one water-soluble lipophilic extract has been examined. Five main lipid classes (free fatty/resin acids, sterols, waxes, steryl esters, triglycerides) were identified and their individual components quantified by gas chromatog. as their trimethylsilyl (TMS) esters (free fatty/resin acids) and TMS ethers (sterols). The abundant saturated fatty acids were palmitic acid (C₁₆:0), myristic acid (C₁₄:0), and pentadecanoic acid (C₁₅:0). Palmitoleic acid (C₁₆:1), linoleic acid (C₁₈:2), and oleic acid (C₁₈:1)

were the major unsatd. free fatty acids. Abietic acid was detected as the only single component in the resin acids. Of the sterols identified, β -sitosterol was found to be the major compound together with minor amts. of cholesterol, ergosterol, stigmasterol, and stigmastanol. Palmityl palmitate and oleyl palmitate were identified as the major components in waxes. The steryl esters analyzed were composed of steryl laurate, steryl myristate, steryl palmitate, steryl heptadecanoate, and steryl oleate. Tripalmitin, dipalmitoyl-oleoylglycerol, and triolein were the major components of the triglycerides.

ACCESSION NUMBER: 2003:233232 CAPLUS
DOCUMENT NUMBER: 139:210794
TITLE: Comparative study of organic solvent and water-soluble lipophilic extractives from wheat straw: I. Yield and chemical composition
AUTHOR(S): Sun, Run Cang; Tomkinson, Jeremy
CORPORATE SOURCE: The BioComposites Centre, University of Wales, Bangor, LL57 2UW, UK
SOURCE: Journal of Wood Science (2003), 49(1), 47-52
CODEN: JWSCFG; ISSN: 1435-0211
PUBLISHER: Springer-Verlag Tokyo
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
AB A crude ethanol extract and hexane fraction from *Morinda citrifolia* Linn. (Rubiaceae) show antitubercular activity. The major constituents of the hexane fraction are E-phytol, cycloartenol, stigmasterol, β -sitosterol, campesta-5,7,22-trien-3 β -ol and the ketosteroids stigmasta-4-en-3-one and stigmasta-4-22-dien-3-one. E-Phytol, a mixture of the two ketosteroids, and the epidioxysterol derived from campesta-5,7,22trien-3 β -ol all show pronounced antitubercular activity.

ACCESSION NUMBER: 2002:956419 CAPLUS
DOCUMENT NUMBER: 138:242976
TITLE: Antitubercular constituents from the hexane fraction of *Morinda citrifolia* Linn. (Rubiaceae)
AUTHOR(S): Saludes, Jonel P.; Garson, Mary J.; Franzblau, Scott G.; Aguinaldo, Alicia M.
CORPORATE SOURCE: Research Center for the Natural Sciences, University of Santo Tomas, Manila, 1008, Philippines
SOURCE: Phytotherapy Research (2002), 16(7), 683-685
CODEN: PHYREH; ISSN: 0951-418X
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
AB A method for the simultaneous anal. of tocopherols and sterols was developed. Lipids were extracted with the Folch method, saponified by KOH-ethanol, and then tocopherols, cholesterol, and phytosterols were extracted with hexane. The extracted samples were dried under a nitrogen stream, derivatized using trimethylsilyl compds., and then subjected to a gas chromatog. The recovery rates for cholesterol, stigmasterol, and sitosterol were about 100%, but recovery rates for tocopherols were low (25% for δ -tocopherol and 66% for γ -tocopherol) and varied according to compound structures. However, the recovery rates for δ - and γ -tocopherols increased to about 100% when the amts. of water and hexane were increased to 15 mL at the extraction step after saponification

ACCESSION NUMBER: 2002:589433 CAPLUS

DOCUMENT NUMBER: 137:200433
TITLE: Simultaneous analysis of tocopherols, cholesterol, and phytosterols using gas chromatography
AUTHOR(S): Du, M.; Ahn, D. U.
CORPORATE SOURCE: Dept. of Animal Science, Iowa State Univ., Ames, IA, 50011-3150, USA
SOURCE: Journal of Food Science (2002), 67(5), 1696-1700
CODEN: JFDSAZ; ISSN: 0022-1147
PUBLISHER: Institute of Food Technologists
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB This invention relates to a process for the preparation of tocopherol concs. from a material containing tocopherols and free fatty acids. The free fatty acids in the tocopherol-containing material are converted to the alkali metal salts thereof in a specific organic solvent that can not, practically, dissolve the alkali metal salts of fatty acids. The free fatty acids are removed as a precipitate of their alkali salts, and the tocopherols are recovered from the supernatant by removing the solvent. The said specific organic solvents include acetone, Et acetate, DMF, acetonitrile and their mixts. The alkali salts are preferably sodium and potassium salts. For example, 20 g of soybean oil deodorizer sludge (acid value = 118; saponification value = 147; tocopherol content = 18.19%) was dissolved in 100 mL acetone, 1.52 g NaOH (0.9 equiv of the free fatty acid) dissolved in water was added and the precipitate was removed by centrifugation. The supernatant was collected and the solvent was removed to obtain 8.02 g (yield of 40.1%) of brown oil. The result of chromatog. anal. showed the tocopherol content of 43.06% (recovery = 94.93%) and the phytosterol content of 11.76%. The saponification value of this product was 82.38, which is corresponding to about 43.36% of free fatty acids.

ACCESSION NUMBER: 2002:502846 CAPLUS
DOCUMENT NUMBER: 137:62496
TITLE: Process for preparing tocopherol concentrates
INVENTOR(S): Lee, Min-Hsiung
PATENT ASSIGNEE(S): National Science Council, Taiwan
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6414166	B1	20020702	US 1999-474792	19991229 <- US 1999-474792
PRIORITY APPLN. INFO.:				19991229
REFERENCE COUNT:	9		THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT	

L15 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB The solubility of purified phytosterol, which was separated from deodorizer distillate by esterification, crystallization and recrystn. technique, was studied in several organic solvents. The characteristics of crystallization and separation of crude phytosterol in those organic solvents were also discussed. The exptl. results provided elemental chemical engineering parameters for the selection of suitable solvents such as n-propanol, n-butanol, n-pentanol, acetone and cyclohexanone in the development and scale-up the process for

recrystn. purification of crude phytosterol.
ACCESSION NUMBER: 2002:439937 CAPLUS
DOCUMENT NUMBER: 138:23937
TITLE: Studies on the selection of solvents for the
recrystallization and purification of phytosterol
AUTHOR(S): Xu, Wenlin; Wang, Yaqiong; Huang, Yibo; Lu, Ping
CORPORATE SOURCE: Dept of Chem and Chem Eng, Coll of Sci, Yangzhou Univ,
Yangzhou, 225002, Peop. Rep. China
SOURCE: Yangzhou Daxue Xuebao, Ziran Kexueban (2002
, 5(1), 58-61, 70
CODEN: YDXKFT; ISSN: 1007-824X
PUBLISHER: Yangzhou Daxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L15 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
AB Efficiency of supercrit. fluid extraction for the production of non-volatile terpenoids from Taraxaci radix Supercrit. fluid extraction (SFE) is an extraction technique which exploits the solvent properties of fluids above their critical point. As a result supercrit. fluid extraction was used to gain various active substances from plants. The use of SFE to obtain bioactive substances from medicinal plants over the past twenty years has been proved to be a viable alternative for the extraction of natural compds. Dandelion (*Taraxacum officinale* Wiggers et Webers, Asteraceae) is one of the best known European medicinal plants, not only as a traditional medicine but perspective raw material for modern phyto pharmaceuticals. From the characteristic principles our attention has been directed to triterpenes and phytosterols with anti-inflammatory activity, which were extracted with supercrit. carbon dioxide. Designed expts. were carried out to determine the optimal extraction parameters. The products obtained by supercrit. fluid extraction were compared to exts. prepared by traditional extraction method (Soxhlet) with n-hexane and Et alc. solvents. The content of triterpenes and sterols was monitored after saponification by thin layer chromatog.-densitometry. The products gained by supercrit. fluid extraction were different from the traditional ones both in their appearance and composition. Triterpenes and their esters were extracted quant. by supercrit. fluid extraction using CO₂ as solvent and the extraction dynamic for triterpenes and phytosterols was different. Triterpenes had a higher concentration in the SFE product than in the exts. prepared by traditional methods.

ACCESSION NUMBER: 2002:269318 CAPLUS
DOCUMENT NUMBER: 137:357958
TITLE: Efficiency of supercritical fluid extraction for the production of non-volatile terpenoids from Taraxaci radix
AUTHOR(S): Kristo, Tita Szidonia; Terdy, Peter Pal; Simandi, Bela; Szoke, Eva; Lemberkovics, Eva; Kery, Agnes
CORPORATE SOURCE: Farmakologial Intezet, Semmelweis Egyetem, Gyogyszertudomanyi Kar, Budapest, 1085, Hung.
SOURCE: Acta Pharmaceutica Hungarica (2001), 71(3), 318-324
CODEN: APHGAO; ISSN: 0001-6659
PUBLISHER: Magyar Gyogyszereszeti Tarsasag
DOCUMENT TYPE: Journal
LANGUAGE: Hungarian

L15 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
AB In vegetable oils, phytosterols occur as free sterols or as steryl esters. Few anal. methods report the quantification of esterified

and free sterols in vegetable oils. In this study, esterified and free sterols were separated by silica gel column chromatog. upon elution with n-hexane/ethyl acetate (90:10 vol/vol) followed by n-hexane/diethyl ether/ethanol (25:25:50 by vol). Both fractions were saponified sep. and the phytosterol content was quantified by GC. The anal. method for the anal. of esterified and free sterols had a relative standard deviation of 1.16% and an accuracy of 93.6-94.1%, which was comparable to the reference method for the total sterol anal. A large variation in the content and distribution of the sterol fraction between different vegetable oils can be observed. Corn and rapeseed oils were very rich in phytosterols, which mainly occurred as steryl esters (56-60%), whereas the majority of the other vegetable oils (soybean, sunflower, palm oil, etc.) contained a much lower esterified sterol content (25-40%). No difference in the relative proportion of the individual sterols among crude and refined vegetable oils was observed.

ACCESSION NUMBER: 2002:203494 CAPLUS
 DOCUMENT NUMBER: 136:308783
 TITLE: Analysis of free and esterified sterols in vegetable oils
 AUTHOR(S): Verleyen, T.; Forcades, M.; Verhe, R.; Dewettinck, K.; Huyghebaert, A.; De Greyt, W.
 CORPORATE SOURCE: Department of Organic Chemistry, Ghent, 9000, Belg.
 SOURCE: Journal of the American Oil Chemists' Society (2002), 79(2), 117-122
 CODEN: JAOC7; ISSN: 0003-021X
 PUBLISHER: AOCS Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
 AB Processes, (a) providing a sterol; (b) reacting the sterol with a source of SO₃, whereby a sulfated sterol derivative is formed; (c) neutralizing the sulfated sterol derivative and precipitating the neutralized, sulfated sterol derivative; (d) contacting the derivative with a polar organic solvent and contacting the derivative with a non-polar organic solvent, in any order, for preparing high purity sulfated sterol derivs. in high yield, are disclosed. Thus, sterol mixture containing about 25-30% campesterol, 17-22% stigmasterol and 45-50% sitosterol was reacted with chlorosulfonic acid to afford sulfated sterol products.

ACCESSION NUMBER: 2000:881175 CAPLUS
 DOCUMENT NUMBER: 134:17622
 TITLE: Processes for the preparation of sulfated sterol derivatives
 INVENTOR(S): Milstein, Norman; Behler, Ansgar
 PATENT ASSIGNEE(S): Cognis Corp., USA
 SOURCE: PCT Int. Appl., 14 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000075165	A1	20001214	WO 2000-US15608	20000607 <-
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,				

BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 PRIORITY APPLN. INFO.: US 1999-137922P P 19990607
 US 2000-588771 A 20000606
 OTHER SOURCE(S): CASREACT 134:17622
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
 AB This document discloses a method for purifying 4-desmethylsterols from neutral substances containing the 4-desmethylsterols and undesired neutral components; said method comprises the step of treating the neutral substances with a solvent mixture comprising Me Et ketone, a C1-C6 alkanol and water.
 ACCESSION NUMBER: 2000:772653 CAPLUS
 DOCUMENT NUMBER: 133:307836
 TITLE: Alkanol-methyl ethyl ketone-water solvent system for the separation of sterols
 INVENTOR(S): Hamunen, Antti
 PATENT ASSIGNEE(S): Sterol Technologies Ltd., Finland
 SOURCE: PCT Int. Appl., 24 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064922	A1	20001102	WO 2000-IB539	20000427 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1291355	A1	20030312	EP 2001-660162	20010907 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2003022865	A1	20030320	WO 2002-FI718	20020906 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002321368	A1	20030324	AU 2002-321368	20020906 <--
US 2005010061	A1	20050113	US 2004-487937	20040901
US 7202372	B2	20070410		

PRIORITY APPLN. INFO.: US 1999-131305P P 19990427
 EP 2001-660162 A 20010907
 WO 2002-FI718 W 20020906
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
 AB It was found that by the addition of 2 different, specific sterols,

which preferably are phytosterols, to a liquid fat, the liquid fat was no longer liquid, but showed a firmness, measured as Stevens hardness, significantly higher than that of the liquid fatty compound itself. Preferably, the liquid fat is an edible fat, and the sterols used is a mixture of phytosterols, preferably oryzanol and sitosterol at a min. total weight level of 2 %, preferably 4 %, with a clear optimum at a molar ratio between 3:1 and 1:3, further preferred between 1:2 and 2:1. The composition is preferably used in consumer goods, such as cosmetic products or food products. Also these products comprising such a composition are part of the invention. After dissoln. of the sterols in the fatty compound at elevated temperature, improvement of structuring capacity of the sterols was found by rapid cooling.

ACCESSION NUMBER: 1997:756970 CAPLUS
 DOCUMENT NUMBER: 128:34057
 TITLE: Liquid fatty component containing composition
 INVENTOR(S): Ritter, Heike; Van De Sande, Robert Leo K. M.; Muller, Volkmar
 PATENT ASSIGNEE(S): Unilever Plc, Neth.; Ritter, Heike; Van De Sande, Robert Leo K. M.; Muller, Volkmar; Unilever N.V.
 SOURCE: PCT Int. Appl., 30 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9742830	A1	19971120	WO 1997-EP2597	19970512 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2253855	A1	19971120	CA 1997-2253855	19970512 <--
CA 2253855	C	20030211		
AU 9730282	A	19971205	AU 1997-30282	19970512 <--
AU 767968	B2	20031127		
EP 918465	A1	19990602	EP 1997-924969	19970512 <--
EP 918465	B1	20050112		
R: BE, DE, DK, ES, FR, GB, NL, SE, IE, FI				
HU 9903960	A2	20000328	HU 1999-3960	19970512 <--
CZ 291214	B6	20030115	CZ 1998-3642	19970512 <--
PL 185952	B1	20030930	PL 1997-329763	19970512 <--
SK 284128	B6	20040908	SK 1998-1537	19970512
ES 2235233	T3	20050701	ES 1997-924969	19970512
ZA 9704119	A	19981113	ZA 1997-4119	19970513 <--
US 6846507	B1	20050125	US 1999-180374	19990412
PRIORITY APPLN. INFO.:			EP 1996-201303	A 19960510
			WO 1997-EP2597	W 19970512

L15 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB High cholesterol and saturated lipids intake has been linked to the development of coronary diseases, particularly atherosclerosis. In this study, samples of viscera and chicken meat, as well as manufactured chicken products were analyzed for their sterol content, specially cholesterol, to determine their nutritional quality and to contribute to the development of Venezuelan food composition tables. GC with flame ionization detector was used for the separation and quantification of cholesterol and phytosterols (stigmastanol) in chicken samples purchased on the market in Mar. and Nov. 1995. The method involved lipid extraction, direct saponification with KOH in ethanol, hexane extraction of the

unsaponifiable matter and its injection on the gas chromatog. packed column (SE-30 on Gas-Chrom Q 100-120 mesh). The average cholesterol values in mg/100 g wet sample weight were: 31.13 (manufactured chicken breast); 57.35 (ham-like chicken product); 69.02 (chicken sausages); 60.46 (chicken bologna). No phytosterols (of feed or vegetable origin) were detected, with the exception of a canned meat sample.

ACCESSION NUMBER: 1997:572702 CAPLUS
DOCUMENT NUMBER: 127:160858
TITLE: Cholesterol content in chicken meat and chicken products
AUTHOR(S): Rincon, Alicia Mariela; Carrillo de Padilla, Fanny;
Araujo de Vizcarrondo, Consuelo; Martin, Eduardo
CORPORATE SOURCE: Fac. Farmacia, Univ. Central Venezuela, Caracas,
1041-A, Venez.
SOURCE: Archivos Latinoamericanos de Nutricion (1997
) , 47(1), 81-84
CODEN: ALANBH; ISSN: 0004-0622
PUBLISHER: Sociedad Latinoamericana de Nutricion
DOCUMENT TYPE: Journal
LANGUAGE: Spanish
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB Rice bran oil was prepared by extraction with hexane, supercrit. CO₂, and supercrit. CO₂ plus 5% EtOH as cosolvent. Total sterol contents in the oil prepns. were 9.35, 7.25, and 8.30 mg/g, resp. Campesterol contents were 2.75, 1.85, and 2.20 mg/g, resp. Stigmasterol contents were 1.75, 1.35, and 1.55 mg/g, resp. β -Sitosterol contents were 4.85, 4.05, and 4.55 mg/g, resp.

ACCESSION NUMBER: 1993:537908 CAPLUS
DOCUMENT NUMBER: 119:137908
TITLE: Rice bran oil extraction by supercritical carbon dioxide
AUTHOR(S): Lei, Minggang
CORPORATE SOURCE: Hunan Cereals Oils Sci. Res. Inst., Changsha, 410005,
Peop. Rep. China
SOURCE: Shipin Kexue (Beijing, China) (1993), 159,
43-5
CODEN: SPKHD5; ISSN: 0253-8997
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L15 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB The antitumor activity of the n-hexane, ethanol, and water exts. from the wood-rotting fungus *I. radiatus*, as well as of lupeol, lupenone, ergosterol, and ergosterol peroxide, were investigated in vitro against MCF-7 human mammary adenocarcinoma and Walker 256 carcinosarcoma. The water extract of the fungus was either inactive or only slightly active, whereas the constituents soluble in ethanol and n-hexane were moderately active. The neutral and acidic portions of the n-hexane extract killed 35-40% of the Walker 256 and 50-70% of the MCF-7 cells after 5 days at the greatest concentration of 50 μ g/mL. The acid fraction of the n-hexane extract was rich in fatty acids, whereas the ethanol and water exts. contained unknown constituents. The neutral portion of the n-hexane extract contained sterols and triterpenes, lupane, and Δ 14-taraxerane derivs., Δ 5- and Δ 7- sterols, and ergosterol peroxide. Lupeol and lupenone were inactive. The activity of the n-hexane extract is caused probably by ergosterol derivs. Ergosterol peroxide was active against both cell lines, inhibiting growth of these cancer cells and killing them 100%. Ergosterol was inactive against the Walker 256 cell line, but killed 70% of the MCF-7 cells.

ACCESSION NUMBER: 1989:587066 CAPLUS
DOCUMENT NUMBER: 111:187066

TITLE: Antitumor activity of some extracts and compounds from
Inonotus radiatus
AUTHOR(S): Kahlos, K.; Hiltunen, R.; Kangas, L.
CORPORATE SOURCE: Dep. Pharm., Univ. Helsinki, Helsinki, 00170, Finland
SOURCE: Fitoterapia (1989), 60(2), 166-8
CODEN: FTRPAE; ISSN: 0367-326X
DOCUMENT TYPE: Journal
LANGUAGE: English

L15 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
AB The synergistic antioxidant effects of d-tocopherols (d-Tocs) and extracted components from coffee beans on lard and palm oil were investigated by oven and AOM tests. The components were petroleum ether (PE) and ethanol (EtOH) exts. of dry and roasted beans, hexane -soluble and -insol. components of the EtOH extract and caffeic and chlorogenic acids. Tocs and sterols in different varieties of coffee beans were also analyzed. In coffee beans, β -, α -, and γ -tocopherols were contained in approx. a 4:2:0.1 ratio, the total content being .apprx.5.5-6.9 mg/100 g. The predominance of β -tocopherol is a prominent feature of coffee beans, in contrast to other vegetables and fruits. On lard, the EtOH extract of coffee beans showed greater antioxidant effect than the PE extract; the effect of hexane-insol. components from roasted beans was particularly remarkable. The components also greatly enhanced the effect of a mixture of d-Tocs as their added amts. were increased. The effects on palm oil were essentially the same. Chlorogenic acid in coffee beans showed the same effects as the above components, but they were less pronounced than those of caffeic acid, the constituent moiety of chlorogenic acid. The content of this acid in hexane-insol. components from roasted beans was less than that from dry beans. Thus, the effects of the components may primarily be attributable to caffeic acid derivs. produced from chlorogenic acid by roasting.

ACCESSION NUMBER: 1988:589003 CAPLUS
DOCUMENT NUMBER: 109:189003
TITLE: Studies on the improvement of antioxidant effect of tocopherols. XVII. Synergistic effect of extracted components from coffee-beans
AUTHOR(S): Aoyama, Minoru; Maruyama, Takenori; Kanematsu, Hiromu; Niiya, Isao; Tsukamoto, Masato; Tokairin, Shigeru; Matsumoto, Taro
CORPORATE SOURCE: Japan Inst. Oils and Fats, Tokyo, Japan
SOURCE: Yukagaku (1988), 37(8), 606-12
CODEN: YKGKAM; ISSN: 0513-398X
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

L15 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
AB Existing methods for the identification of mammalian fecal particles in foods have not been completely satisfactory because visual identification of small particles is difficult. In addition, identification of feces by determining the presence of fecal alkaline phosphatase is limited to specimens in which the enzyme has not been inactivated, and it does not work well with feces from herbivores. A new method has been developed which uses coprostanol as a fecal indicator. Coprostanol is a heat-stable sterol found in the feces of mammals and some birds. A hexane extract of the suspect particle is applied to the preadsorbent zone of a silica gel thin-layer chromatog. plate which has been impregnated with 5% phosphomolybdic acid in ethanol. The plate is developed in di-Et ether-heptane (55 + 45), heated, and examined visually for the presence of coprostanol. Amts. of rat feces as small as 0.15 mg and cow feces as small as 0.5 mg have been identified using this method.

ACCESSION NUMBER: 1987:476241 CAPLUS
DOCUMENT NUMBER: 107:76241
TITLE: Identification of mammalian feces by coprostanol thin

AUTHOR(S): layer chromatography: method development
 Hoskin, George P.; Bandler, Ruth
 CORPORATE SOURCE: Div. Microbiol., Food Drug Adm., Washington, DC,
 20204, USA
 SOURCE: Journal - Association of Official Analytical Chemists
 (1987), 70(3), 496-8
 DOCUMENT TYPE: CODEN: JANCA2; ISSN: 0004-5756
 LANGUAGE: English

L15 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN

AB Pollen of walnut (*J. regia*) was 1st extracted with ether, whereby most of the free steroids were obtained. Then the sterol glycosides and esters in the pollen were extracted by acetone. The acetone exts. obtained were hydrolyzed with 1% H₂SO₄ and then with 10% KOH. After that the hydrolyzate was extracted with n-hexane and ether. All exts. were combined and washed with 70% methanol to remove the impurities, then the extract was evaporated to dryness under vacuum. 3 β -Hydroxysteroids were precipitated after adding a solution of 2% digitonin in 80% ethanol to the dry extract. The impurities, consisting mainly of pigments, were removed from the precipitate by centrifugation. The purified sterol compds. were allowed to react with bis(trimethylsilyl)acetamide and trimethylchlorosilicane which converted the sterols into their resp. trimethylsilyl derivs. The derived sterols were analyzed by GC-MS. The pollen contained estridiol and stigmasterol.

ACCESSION NUMBER: 1987:30076 CAPLUS
 DOCUMENT NUMBER: 106:30076
 TITLE: Isolation and identification of some steroid hormones
 in the pollen of walnut (*Juglans regia*) by gas
 chromatography/mass spectrometry
 AUTHOR(S): Wang, Huanmin; Cao, Zongxun
 CORPORATE SOURCE: Dep. Biol., Beijing Univ., Beijing, Peop. Rep. China
 SOURCE: Zhiwu Shengli Xuebao (1986), 12(3), 218-23
 DOCUMENT TYPE: CODEN: CWSPDA; ISSN: 0257-4829
 LANGUAGE: Chinese

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 COST IN U.S. DOLLARS

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	129.37	129.58

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